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Form PTO-1449  INFORMATION DISCLOSURE CITATION IN AN APPLICATION  (Use several sheets if necessary)	Document Number 20020011.ORI	Application Number 10/031,975
	Applicant John Collinge et al	
	Filing Date January 24, 2002	Group Art Unit Unknown. 1648

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
J	5,891,641	04/06/99	Prusiner et al.			

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation YES   NO
WO 98 16834 A	04/23/98	PCT			

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)

2	Assaf & Shin-Ho Chung, NATURE, Release of Endogenous EN <sup>2</sup> from Brain Tissue During Activity, Vol 308, 19 April 1984, pp. 734-736
	Atwood et al, JOURNAL OF BIOLOGICAL CHEMISTRY, Dramatic Aggregation of Alzheimer A $\beta$ by Cu(II) is Induced by Conditions Representing Physiological Acidosis, Vol 273, No. 21, May 22, 1998, pp. 12817-12826
1	Bessen et al, JOURNAL OF VIROLOGY, Distinct PrP Properties Suggest the Molecular Basis of Strain Variation in Transmissible Mink Encephalopathy, Vol. 68, No. 12, Dec. 1994, pp. 7859-7868
	Bessen et al, NATURE, Non-genetic Propagation of Strain-Specific Properties of Scrapie Prion Protein, Vol. 375, June 22, 1995, pp. 698-700
	Klein et al. NATURE, The Cellular Prion Protein Binds Copper in vivo, Vol. 390, December 18/25, 1997, pp. 684-687
	Brown et al, BIOCHEM J., Prion protein expression and superoxide dismutase activity, (1998), 334, pp. 423-429
	Bruce et al, NATURE, Transmissions to mice indicate that 'new variant' CJD is caused by the BSE agent, Vol. 389, 2 October 1997, pp. 498-501
	William W. Carlton, EXPERIMENTAL AND MOLECULAR PATHOLOGY, Spongiform Encephalopathy Induced in Rats and Guinea Pigs by Cuprizone <sup>1,2</sup> , 10, (1969), pp. 274-287
	Caughey et al, JOURNAL OF BIOLOGICAL CHEMISTRY, Strain-dependent Differences in $\beta$ -Sheet Conformations of Abnormal Prion Protein, Vol. 273, No. 48, November 27, 1998, pp. 32230-32235

EXAMINER J	DATE CONSIDERED 11/22/04
---------------	-----------------------------

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					YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)

	John Collinge, HUMAN MOLECULAR GENETICS, Human Prion Diseases and Bovine Spongiform Encephalopathy (BSE), Vol. 6, (1997), pp. 1699-1705
	Collinge et al, THE LANCET, Genetic Predisposition to Iatrogenic Creutzfeldt-Jakob Disease, Vol. 337, June 15, 1991, pp. 1441
	Collinge et al, THE LANCET, Prion Protein Gene Analysis in New Variant Cases of Creutzfeldt-Jakob Disease, Vol. 348, No. 9019, July 6, 1996, p. 56
	Collinge et al, NATURE, Molecular Analysis of Prion Strain Variation and the Aetiology of 'New Variant' CJD, Vol. 383, October 24, 1996, pp. 685-690
	Collins et al, THE LANCET, Surgical Treatment and Risk of Sporadic Creutzfeldt-Jakob Disease: A Case-Control Study, Vol. 353, February 27, 1999, pp. 693-697
	Dawson et al, OXFORD UNIVERSITY PRESS, 17 Stability Constants of Metal Complexes, (1986), pp. 399-415
	NATURE, The Same Prion Strain Causes vCJD and BSE, Vol. 389, 2 October 1997, pp. 448-450
	Hill et al, THE LANCET, Investigation of Variant Creutzfeldt-Jakob Disease and Other Human Prion Diseases With Tonsil Biopsy Samples, Vol. 353, January 16, 1999, pp. 183-189
	Hornshaw et al, BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, Copper Binding to the N-Terminal Tandem Repeat Regions of Mammalian and Avian Prion Protein, Vol. 207, No. 2, February 15, 1995, pp. 621-629

EXAMINER 	DATE CONSIDERED w/27/04
--------------	----------------------------

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	Hornshaw et al, BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, Copper Binding to the N-Terminal Tandem Repeat Region of Mammalian and Avian Prion Protein: Structural Studies Using Synthetic Peptides, Vol. 214, No. 3, September 25, 1995, pp. 993-999
	Lovell et al, JOURNAL OF THE NEUROLOGICAL SCIENCES, Copper, Iron and Zinc in Alzheimer's Disease Senile Plaques, 158, (1998), pp. 47-52
	McKenzie et al, JOURNAL OF BIOLOGICAL CHEMISTRY, Rerversibility of Scrapie Inactivation Is Enhanced by Copper, Vol. 273, No. 40, October 2, 1998, pp. 25545-25547
	Miura et al, FEBS LETTERS, Metal-dependent $\alpha$ -helix Formation Promoted by the Glycine-rich Octapeptide Region of Prion Protein, Vol. 396, (1996), pp. 248-252
	Palmer et al, NATURE, Homozygous Prion Protein Genotype Predisposes to Sporadic Creutzfeldt-Jakob Disease, Vol. 352, July 25, 1991
	Pan et al, PRO. NATL. ACAD. SCI., Conversion of $\alpha$ -helices into $\beta$ -Sheets Features in the Formation of the Scrapie Prion Proteins, Vol 90, December 1993, pp. 10962-10966
	Parch et al, ANNALS OF NEUROLOGY, Molecular Basis of Phenotypic Variability in Sporadic Creutzfeldt-Jakob Disease, January 1996, pp. 767-778
	Dammer et al, NATURE, Typing Prion Isoforms, Vol. 386, March 20, 1997, pp. 232-233
	Billingham et al, NATURE, Histopathological Similarities Between Scrapie and Cuprizone Toxicity in Mice, Vol. 230, March 12, 1971, pp. 115-117

EXAMINER 	DATE CONSIDERED 4/22/04
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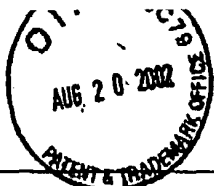
	Pauly et al, JOURNAL OF BIOLOGICAL CHEMISTRY, Copper Stimulates Endocytosis of the Prion Protein, Vol. 273, No. 50, December 11, 1998, pp. 33107-33110
	Prusiner, SCIENCE, Molecular Biology of Prion Diseases, Vol. 252, June 14, 1991, pp. 1515-1522
	Riek et al, NATURE, NMR Structure of the Mouse Prion Protein Domain PrP(121-231), Vol. 382, July 11, 1996, pp. 180-182
	Stockel et al, BIOCHEMISTRY, Prion Protein Selectively Binds Copper(II) Ions, Vol. 37, No. 20, (1998), pp. 7185-7193
	Telling et al, SCIENCE, Evidence for the Conformation of the Pathologic Isoform of the Prion Protein Enciphering and Propagating Prion Diversity, Vol. 274, December 20, 1996, pp. 2079-2082
	Viles et al, PRO. NATL. ACAD. SCI., Copper Binding to the Prion Protein: Structural Implications of Four Identical Cooperative Binding Sites, Vol 96, March 1999, pp. 2042-2047
	Wadsworth et al, NATURE CELL BIOLOGY, Strain-Specific Prion Protein Conformation Determined by Metal Ions, Vol. 1, May 1999, pp. 55-59
	Will et al, LANCET, A New Variant of Creutzfeldt-Jakob Disease in the UK, Vol. 347, April 6, 1996, pp. 921-925

EXAMINER 	DATE CONSIDERED 11/27/04
--------------	-----------------------------

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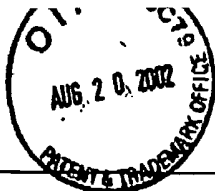
DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
					YES	NO

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)

	Bai et al., PROTEINS, Primary Structure Effects on Peptide Group Hydrogen Exchange, Vol. 17, (1993), pp. 75-86
	Bai et al, SCIENCE, Protein Folding Intermediates: Native-State Hydrogen Exchange, Vol. 269, July 14, 1995, pp. 192-197
	Billeter et al, PRO NATL ACAD SCI USA, Prion Protein NMR Structure and Species Barrier for Prion Diseases, Vol. 94, July 1997, pp. 7281-7285
	Booth et al, NATURE, Ninstability, Unfolding and Aggregation of Human Lysozyme Variants Underlying Amyloid Fibrollogenesis, Vol. 385, February 1997, pp. 787-793
	Collinge et al, LANCET, Diagnosis of Gerstmann-Straussler Syndrome in Familial Dementia With Prion Protein Gene Analysis, Vol. 2, July 1, 1989, pp. 15-17
	Collinge et al, LANCET, Transmission of Fatal Familial Insomnia to Laboratory Animals, (1995), Vol. 346, pp. 569-70
	Donne et al, PRO. NATL. ACAD. SCI. USA, Structure of the Recombinant Full-Length Hamster Prion Protein PrP(29-231): The N Terminus is Highly Flexible, Vol. 94, December 1997, pp. 13452-13457
	Hsiao et al., NATURE, Linkage of a Prion Protein Missense Variant to Gerstmann-Straussler Syndrome, Vol. 338, March 23, 1989, pp. 342-345
Hayes et al, JOURNAL OF MOLECULAR BIOLOGY, Engineered Assembly of Intertwined Oligomers of an Immunoglobulin Chain, Vol. 285, (1999), pp. 1855-1865	

EXAMINER 	DATE CONSIDERED 4/27/04
--------------	----------------------------

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U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

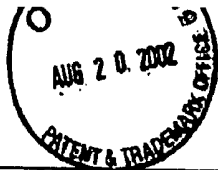
DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)

	Hornemann et al., PRO NAT'L ACAD SCI USA, A Scrapie-like Unfolding Intermediate of the Prion Protein Domain PrP(121-231) Induced by Acidic pH, Vol. 95, (1998), pp. 6010-6014
	Hosszu et al, NATURE STRUCTURAL BIOLOGY, Structural Mobility of the Human Prion Protein Probed by Backbone Hydrogen Exchange, Vol. 6(8), August 1999, pp. 740-743
	Jackson et al, SCIENCE, Reversible Conversion of Monomeric Human Prion Protein Between Native and Fibrillogenic Conformations, Vol. 283, March 19, 1999, p. 1935-1937
	James et al, PROC NATL ACAD SCI USA, Solution Structure of a 142-residue Recombinant Prion Protein Corresponding to the Infectious Fragment of the Scrapie Isoform, Vol. 94, September 1997, pp. 10086-10091
	Korth et al, NATURE, Prion (PrP <sup>Sc</sup> )-Specific Epitope Defined by a Monoclonal Antibody, Vol. 390, November 6, 1997, pp. 74-77
	Kascsak et al, JOURNAL OF VIROLOGY, Mouse Polyclonal and Monoclonal Antibody to Scrapie-Associated Fibril Proteins, Vol. 61, No. 12, pp. 3688-3698
	Kelly, CURRENT BIOLOGY LTD., Alternative Conformations of Amyloidogenic Proteins Govern Their Behavior, Vol. 6, (1996), pp. 11-17
	Murray et al, PROC NATL ACAD SCIE USA, One Sequence, Two Folds: A Metastable Structure of CD2, Vol. 92, August 1995, pp. 7337-7341
Scott et al, PNAS, Identification of a Prion Protein Epitope Modulating Transmission of Bovine Spongiform Encephalopathy Prions to Transgenic Mice, Vol. 94, December 1997, pp. 14279-14284	

EXAMINER 	DATE CONSIDERED 11/27/04
--------------	-----------------------------

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U.S. PATENT DOCUMENTS

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FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
						YES	NO
✓	WO 98/16834	23/04/98	PCT				
↓	WO 98/37210	27/08/98	PCT				
↓	WO 98/55132	10/12/98	PCT				

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Papers, Etc.)

J ↓	Serban et al, NEUROLOGY, Rapid Detection of Creutzfeldt-Jakob Disease and Scrapie Prion Proteins, Vol. 40, (1990), pp. 110-117
	Wishart et al, JOURNAL OF BIOMOLECULAR NMR, Cthe <sup>13</sup> C Chemical-Shift Index: A Simple Method for the Identification of Protein Secondary Structure Using <sup>13</sup> C Chemical-Shift Data, Vol. 4, (1994), pp. 171-180
	Wishart et al, JOURNAL OF MOLECULAR BIOLOGY, Relationship Between Nuclear Magnetic Resonance Chemical Shift and Protein Secondary Structure, Vol. 222, (1991), pp. 311-333
	Zhang et al, BIOCHEMISTRY, Physical Studies of Conformational Plasticity in a Recombinant Prion Protein, Vol. 36 (1997), pp. 3543-3553

EXAMINER 	DATE CONSIDERED 6/22/04
--------------	----------------------------

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